

**Notice of Allowability**

Application No.

10/023,787

Applicant(s)

FARMER, MICHAEL EDWARD

Examiner

Manav Seth

Art Unit

2624

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 04/19/2006.
2. ☒ The allowed claim(s) is/are 1, 3-13, 15-16 and 18-46 (renumbered as 1-43).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 12/17/2006
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 04282006
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment received on April 19, 2006 has been entered in full.
2. Applicant's amendment to the claims has been entered and based on the amendments claim objections on the respective claims have been withdrawn.
3. Applicant's arguments with respect to rejected claims as presented in the amendment filed have been fully considered and are persuasive. Therefore, the prior art rejections on the respective claims have been withdrawn.

### ***Examiner's Amendment***

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with applicant's attorney/agent of record, Mr. Jeffrey R. Jeppsen, Registration No. 53,072, on 04/27/2006, at 3:00 p.m., Examiner's amendment:

### ***In The Claims***

5. The following changes to the claims have been approved by the examiner and agreed upon by applicant:

(a) Replace claim 1 limitation “setting a second revised pixel value for one or more of said pixels on the basis of one or more first revised pixel values that are associated with one or more pixels in the vicinity of the pixel being set, wherein setting the second revised pixel value includes a momentum-based heuristic”, with, - - **setting a second revised pixel value for one or more of said pixels on the basis of one or more first revised pixel values that are associated with one or more sequential pixels in the vicinity of the pixel being set, wherein setting the second revised pixel value includes a momentum-based heuristic - -.**

(b) Replace claim 20 limitation “a gap processing subsystem, including a gap processing heuristic, a subset of vicinity pixels in said plurality of pixels, and a plurality of pixel values, said gap processing subsystem selectively setting said pixel values in accordance with said gap processing heuristic and said pixel values belonging to said pixels in said subset of vicinity pixels, said gap processing heuristic including momentum-based heuristic”, with, - - **a gap processing subsystem, including a gap processing heuristic, a subset of sequential vicinity pixels in said plurality of pixels, and a plurality of pixel values, said gap processing subsystem selectively setting said pixel values in accordance with said gap processing heuristic and said pixel values belonging to said pixels in said subset of sequential vicinity pixels, said gap processing heuristic including momentum-based heuristic - -.**

*Allowable Subject Matter*

**Reasons of Allowance:**

6. Claims 1, 3-13, 15-16 and 18-46 (renumbered as 1-43) are allowed.

The following is an examiner's statement of reasons of allowance:

The reasons of allowance for claims 1 and 20 should be evident from the applicant's arguments in last paragraph of page 12 and first paragraph of page 14 of the amendment filed on April 19, 2006. Both the instant invention and the combined closest prior art (Baxes, Book Publication, 1994, "Digital image processing: principles and application" and Yokoyama, U.S. Patent No. 5,715,006) are directed to a method of image segmentation to identify objects (occupants) in the images. The instant invention further recites the limitation "setting a second revised pixel value for one or more of said pixels on the basis of one or more first revised pixel values that are associated with one or more sequential pixels in the vicinity of the pixel being set, wherein setting the second revised pixel value includes a momentum-based heuristic", where the prior art of record does not teach setting the second revised pixel value based on the **sequential vicinity pixels using momentum-based heuristic**. Therefore claims 1 and 20 are allowed. All other claims depending on claims 1 and 20 are allowable at least by dependency on claims 1 and 20.

The instant invention further recites the limitations "determining a third revised pixel value from said second revised pixel value or said first revised pixel value with a momentum-based heuristic; identifying regions of pixels based on the first revised pixel value, the second revised pixel value, and the third revised pixel value" in claim 18 whereas Baxes and other prior art of record does not teach use of momentum-based operations or heuristic to identify regions of pixels based on the first revised pixel value, the second revised pixel value, and the third revised pixel value and so on. Therefore claim 18 is allowed. Claim 19 is dependent on claim 18 and therefore is allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

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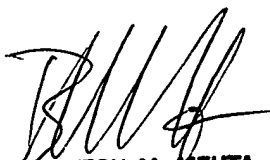
Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manav Seth whose telephone number is (571) 272-7456. The examiner can normally be reached on Monday to Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Manav Seth  
Art Unit 2624  
April 28, 2006

  
**BHAVESH M. MEHTA**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**